

Notice of Allowability**Application No.**

09/910,929

Applicant(s)

LE FLOCH, HERVE

Examiner

JEFFREY D. POPHAM

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERIT IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8/22/2008.
2. ☒ The allowed claim(s) is/are 1,3,8,10,15,17 and 19-22.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date ____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 20080926.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.

/Jeffrey D Popham/
Examiner, Art Unit 2137

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jonathon Berschadsky on 9/26/2008.

Please amend the claims as follows:

In the Claims:

8. (Currently Amended) A programmed computer for inserting a message into digital data representative of physical quantities, the message including ordered symbols, the programmed computer comprising:

a microprocessor storing:

means for segmenting the data into regions;

means for associating at least one region with each symbol to be inserted,

~~wherein said device further includes:~~

means for determining a pseudo-random function, for each region into which a symbol in question is to be inserted, from a key which depends on an initial key and on a length of the message,

Art Unit: 2137

means for modulating the symbol in question by the previously determined pseudo-random function in order to supply a pseudo-random sequence, and

means for adding the pseudo-random sequence to the region in question, wherein said means for determining a pseudo-random function is configured in such a way that a dependence of the key on the length of the message is provided by a dependence of the key on:

the number of times the symbol to be inserted has already been inserted into other regions, and

the ranking of the symbol among the ordered symbols.

15. (Currently Amended) A programmed computer according to Claim 8, wherein said means for ~~segmenting and associating, and said means for segmenting, associating,~~ determining modulating, and adding are performed by:

a the microprocessor,
a read-only memory including a program for processing the data, and
a random-access memory including registers suitable for recording variables modified during running of the program.

Allowable Subject Matter

Claims 1, 3, 8, 10, 15, 17, and 19-22 are allowed.

The following is an examiner's statement of reasons for allowance: The prior art teaches various methods of inserting messages (e.g., watermarking) digital data, including the use of pseudo-random functions determined from keys

that are dependent upon the length of the message to be inserted. What the prior art is missing is determining a pseudo-random function from a key which depends on an initial key, the number of times the symbol to be inserted has already been inserted into other regions, and the ranking of the symbol among the ordered symbols within a method such as claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY D. POPHAM whose telephone number is (571)272-7215. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571)272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2137

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Emmanuel L. Moise/
Supervisory Patent Examiner, Art Unit 2137

Jeffrey D Popham
Examiner
Art Unit 2137

/Jeffrey D Popham/
Examiner, Art Unit 2137